

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

Rulemaking to Amend Parts 1, 2, 21 and 25 )  
of the Commission's Rules to Redesignate )  
the 27.5-29.5 GHz Frequency Band, to )  
Reallocate the 29.5-30.0 GHz Frequency Band, )  
and to Establish Rules and Policies for Local )  
Multipoint Distribution Service and for )  
Fixed Satellite Services )

CC Docket No. 92-297

First Report and Order and )  
Fourth Notice of Proposed Rulemaking )

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**PETITION FOR RECONSIDERATION OF  
TEXAS INSTRUMENTS, INC.**

Texas Instruments, Inc. ("TI"), by its attorneys, hereby submits a Petition for  
Reconsideration in the above-captioned proceeding ("*First Report and Order*" or "*Fourth  
Notice*").<sup>1</sup>

**I. INTRODUCTION AND SUMMARY**

As TI stated in its comments in response to the *Fourth Notice* in this proceeding, TI is  
appreciative that the Commission, after nearly four years of consideration, has decided on a  
band plan that could allow LMDS business plans to go forward, and has released a tentative

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<sup>1</sup> Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to  
Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency  
Band, and to Establish Rules and Policies for Local Multipoint Distribution Service and for  
Fixed Satellite Services (First Report and Order and Fourth Notice of Proposed Rulemaking),  
CC Docket No. 92-267, FCC 96-311 (rel. July 22, 1996).

LMDS auction schedule. Prompt licensing of LMDS systems is necessary in order to enable LMDS operators to offer consumers a full range of interactive video, voice and data services in competition with traditional cable and telephone carriers.

TI is also appreciative that the Commission has recognized the need to designate additional spectrum for LMDS.<sup>2</sup> In this regard, TI supports the Commission's proposal to allocate 300 megahertz of spectrum at 31 GHz to LMDS. Additionally, TI enthusiastically supports efforts to identify and allocate additional spectrum for LMDS in the 25.25 - 27.5 GHz band.

While TI urges the Commission to promptly move forward with the LMDS licensing process, TI believes that it is also essential for the Commission to concurrently issue a clarification of the *First Report and Order* to decide several issues that were not resolved in the Commission's decision.<sup>3</sup> Most importantly, the Commission should determine the process that must be utilized in order to demonstrate that sharing is feasible in the 29.1 - 29.25 GHz band.

## **II. THE COMMISSION SHOULD CLARIFY THE POSSIBLE EXPANDED USE BY LMDS OF THE 29.1 - 29.25 GHZ BAND.**

In the *First Report and Order*, the Commission decided that even though LMDS would be a "primary" user of the 29.1 - 29.25 GHz band, LMDS subscriber-to-hub links

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<sup>2</sup> See *Fourth Notice* at ¶ 39.

<sup>3</sup> Alternatively, as TI has already suggested in its comments in response to the *Fourth Notice*, the Commission should utilize the *Fourth Notice* proceeding to clarify the steps necessary for LMDS to enjoy expanded use of the 29.1 - 29.25 GHz band.

would not be allowed in the band. Despite considerable evidence to the contrary, the Commission concluded that "undesirable constraints would need to be placed on either Motorola's NGSO/MSS system feeder links or LMDS subscriber-to-hub links in order to permit sharing in this 150 MHz band segment".<sup>4</sup> The Commission also stated, however, that the constraint on LMDS use of the 29.1 - 29.25 GHz band for subscriber-to-hub links could be reconsidered in the future.<sup>5</sup>

Unfortunately, the FCC failed to clarify the steps that would be necessary to vacate the subscriber-to-hub limitation. At one point in the *First Report and Order*, for example, the Commission indicated that the limitation could be removed following agreement among the parties "that LMDS return links can operate here in this band under mutually acceptable sharing criteria".<sup>6</sup> At another point, the FCC described the process as one by which LMDS proponents could "demonstrate definitively that they can technically operate" return links in the band "on a non-interference basis".<sup>7</sup>

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<sup>4</sup> *First Report and Order* at ¶ 37. To the extent that the Commission's decision was based on a determination that "TRW, because of different system parameters than Motorola, was able to develop sharing principles with LMDS in the subscriber-to-hub direction", *id.* at ¶ 37, n.73, it is plainly incorrect. In fact, Motorola's operating parameters are not in the record of this proceeding and could not be evaluated.

<sup>5</sup> *See id.* at ¶¶ 37, 71; *Fourth Notice* at ¶ 98.

<sup>6</sup> *First Report and Order* at ¶ 37.

<sup>7</sup> *Id.* at ¶ 71; *see also Fourth Notice* at ¶ 98 (indicating that the Commission would reconsider the limitation "should LMDS providers or LMDS equipment manufacturers be able to demonstrate that LMDS can share through mutually agreed upon criteria, on a non-interference basis with MSS feeder links in this band segment").

TI requests that this ambiguity be clarified in order to provide certainty to operators and manufacturers of LMDS and MSS systems. Interference studies, technical modifications, and industry negotiations cannot be initiated without a clear understanding of the level of consensus and/or technical precision that must be achieved. Accordingly, TI urges the Commission to consider the following questions:

1. If the Commission expects an agreement between users of the band, what is the process for reaching such an agreement? Will the FCC take an active role in reaching such an agreement? If not, what incentives will the Commission provide for those users who have unrestricted use of the band to reach an agreement with those users who have only restricted use of the band?
2. If the Commission alternatively expects LMDS proponents unilaterally to "demonstrate definitively" that LMDS can operate return links without interference to satellite operations, how should LMDS parties go about making such a showing? Will the FCC ensure that LMDS operators have access to sufficient information regarding the operating parameters of satellite systems or experimental authorizations in order to make such a demonstration?
3. Alternatively, will subscriber-to-hub devices be allowed to operate on a secondary basis in the band?

Only through resolution of the above questions can LMDS proponents proceed with efforts to resolve interference concerns in the 29.1 - 29.25 GHz band. Furthermore, TI requests that the Commission respond to these issues promptly in order to permit planning for LMDS systems to move forward to completion.<sup>8</sup>

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<sup>8</sup> TI believes that if the Commission is unable to provide a realistic process for gaining greater access to the 29.1 - 29.25 GHz band, then the Commission should ensure that additional spectrum is provided for LMDS in the 25.25 - 27.5 GHz range.

### **III. THE COMMISSION SHOULD CLARIFY THAT FIXED MICROWAVE OPERATORS THAT LEASE LMDS SPECTRUM MUST COORDINATE WITH PRIMARY LMDS LICENSEES.**

Finally, TI requests that the Commission clarify that if fixed point-to-point microwave ("FS") operators arrange to lease LMDS spectrum from LMDS licensees, those operators would be required to conduct coordination in order to ensure that there is no interference to primary LMDS users. While the Commission acknowledged in its *Third Notice of Proposed Rulemaking* that FS operators could lease spectrum from LMDS operators,<sup>9</sup> the Commission failed to clarify in the *First Report and Order* the usage restrictions that must exist on such lease agreements.<sup>10</sup>

### **IV. CONCLUSION**

TI is strongly encouraged by the fact that, after years of waiting, spectrum has been allocated for LMDS and a tentative auction schedule has been released. As TI has stated in other pleadings, the Commission should move expeditiously to auction and license LMDS systems in order to provide innovative competition to traditional cable and telephone systems.

TI's decision to seek reconsideration of the Commission's *First Report and Order* is not inconsistent with TI's desire for rapid authorization of LMDS. Instead, TI urges the Commission to clarify several aspects of its *First Report and Order* concurrently with the

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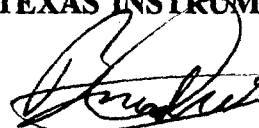
<sup>9</sup> See Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, and to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services and Suite 12 Group Petition for Pioneer's Preference, 11 FCC Rcd 53, 73 (1995).

<sup>10</sup> See *First Report and Order* at ¶ 86.

Commission's preparations for auctions, and the Commission's deliberations with respect to allocating additional spectrum at 31 and 25.25 - 27.5 GHz for LMDS. Most importantly, the Commission should definitively state the steps that will be required for LMDS proponents to seek and obtain reconsideration of the Commission's limitation on subscriber-to-hub links in the 29.1 - 29.25 GHz band. Efforts to resolve any interference problems that have been alleged cannot be initiated until the parties involved have a clear understanding of the steps necessary to achieve reconsideration of the Commission's subscriber-to-hub constraint.

Respectfully submitted,

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